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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/540,969	06/29/2005	Stephen Pasquarella	89200.000007	4313

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EXAMINER

KOVAL, MELISSA J

ART UNIT	PAPER NUMBER
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2862

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/540,969	Applicant(s) PASQUARELLA ET AL.	
	Examiner MELISSA J. KOVAL	Art Unit 2862	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 March 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-32 is/are pending in the application.
- 4a) Of the above claim(s) 21-32 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15-17 is/are rejected.
- 7) ☒ Claim(s) 18-20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>11/22/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Claims 21 through 32 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Invention (a damping system for arresting motion classified in 267/136), there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on March 12, 2008.

Claim Objections

2. Claim 17 is objected to because of the following informalities: "a dive arm" should be changed to - - a drive arm - -. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 15-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Starp U.S. Patent 3,533,345.

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See Figure 1.

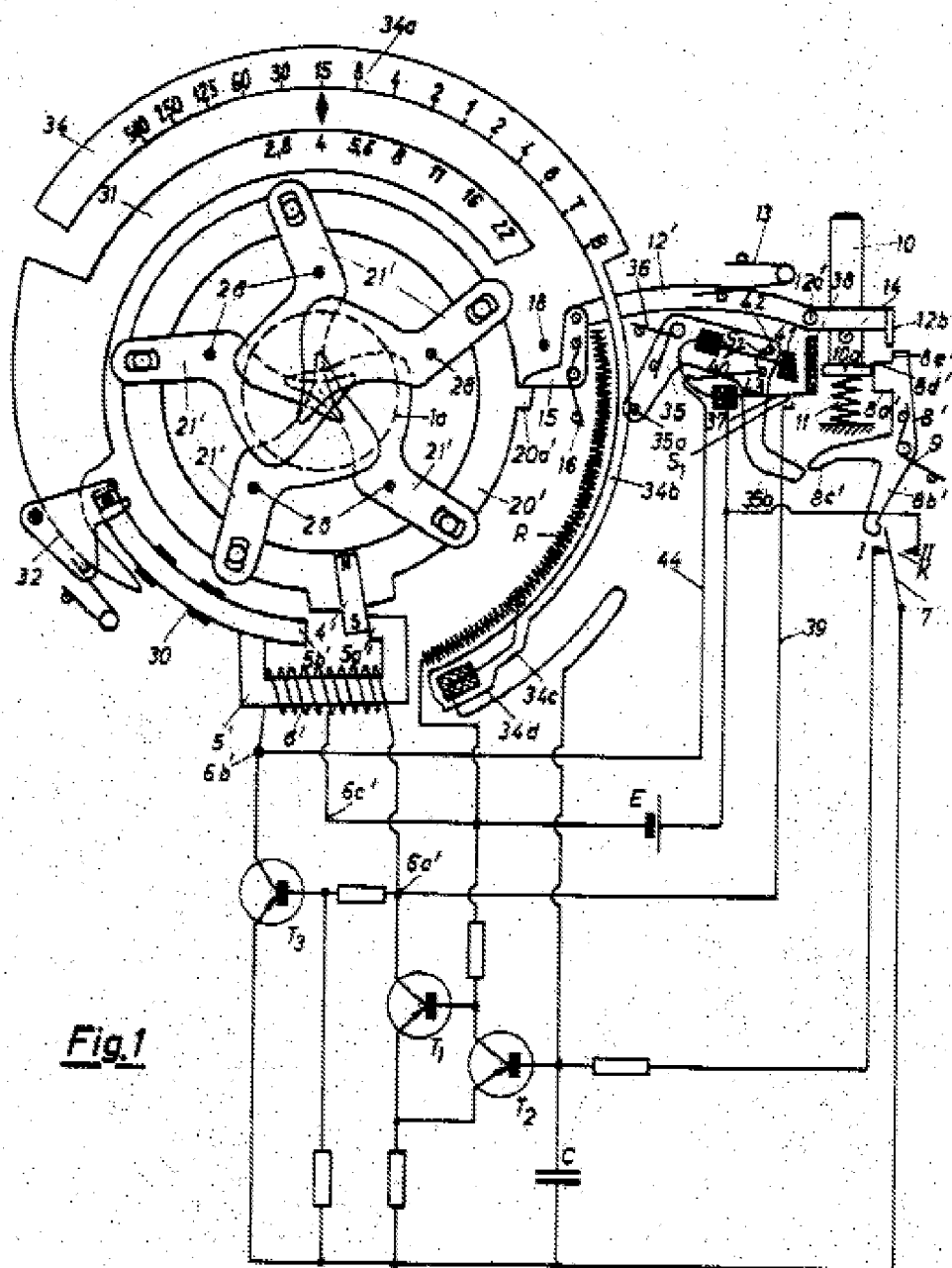


Fig.1

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5. Claim 15 sets forth: "A rotary photographic shutter or the like including a plurality of shutter blades (shutter blades 21') movable between an open and a closed position, a drive means including an actuator for moving the shutter blades between the open and closed positions (See driving ring 20' comprising permanent bar magnet 4' as well as fixed electromagnets 5' and 6'. Also see actuator lever 8') and a damping system operable to arrest the movement of the drive means at one of the open and closed positions (See spring 16, lug 20a and fixed pin 18).

See column 2, lines 65 through 75, and column 3, lines 1 through 50.

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In accordance with the drawing, as well as the parent patent (U.S. Pat. application Ser. No. 509,888) 1a is the lens aperture of the base plate (not shown) of a photographic shutter. The aperture is covered or masked by several as for example, five shutter blades 21', when the shutter is in the closed position. Each shutter blade 21' is positioned on a fixed pin 28. The drive of the shutter blades 21' is obtained through the driving ring 20' which, in turn, carries the permanent bar magnet 4'. Associated with this permanent magnet is the fixed electromagnet 5'-6', the coil of which has the terminals 6a' and 6b', as well as the center tap 6c'.

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The free end of the permanent magnet 4' designated as the south pole, may travel back and forth between the poles 5a' and 5b' of the electromagnet 5'-6'. This end of magnet 4' engages the pole 5a' when the shutter is in the closed position, while it engages the pole 5b' when the shutter is in the open position. The position of pole 5b' may be variable with respect to its counterpole 5a'. Pole 5b' may be constructed in the form of yoke 30. This arrangement makes it possible to vary the angle of swing of the permanent magnet 4', and thereby the movement of shutter blades 21' out of the closing position. In this manner the size of the diaphragm can be set simultaneously by means of the shutter blades. In this connection, yoke 30 is slidably positioned within fixed guides (not shown in the drawing). The yoke can be moved by means of a diaphragm setting member 31 through the cam-controlled, two-arm lever 32.

For the purpose of automatically controlling the drive system consisting of permanent magnet 4' and electromagnet 5'-6' the terminals 6a', 6b' and 6c' are connected, just as in the arrangement according to the Main Patent, to an electronic timing circuit. The circuit can be connected to the source of energy E by means of the contact switch K.

The arrangement is similar to that of the parent patent. Components of the timing circuit are the adjustable resistor R, the capacitor C, as well as a plurality of transistors T₁, T₂ and T₃. Connected in series with the contact switch K, is the transistor T₁, as well as the winding 6a'-6c' of magnet coil 6'. The capacitor C connected to transistor T₂, and the resistor R, are arranged in a circuit which forms a time delay circuit.

The ohmic value of the resistor R can be varied by means of the time setting member 34 for obtaining different exposure times. Connected in parallel with the circuit containing the RC combination, is the transistor T₃ whose collector is connected to terminal 6b'. The terminal 6c' engages directly the negative pole of the power source. The other resistors, not referenced in the wiring diagram, serve to complete the preceding electronic circuit. The switch K is actuated by the lever 8', which engages the collar 10a of push button 10 due to the action of spring 9. The push button 10 acted upon by spring 11, is locked in the release position shown in FIG. 2 by the edge 8a' of contact lever 8'.

6. Claim 16 sets forth: "A rotary photographic shutter comprising:

- a) a base plate having a central aperture (See driving ring 20');
- b) a plurality of rotating ring operable shutter blades supported by the base plate for opening and closing the aperture (See shutter blades 21'); and
- c) a damping system on the base plate operable to dampen the opening and closing of the rotating ring operable shutter blades (See spring 16, lug 20a and fixed pin 18)."

7. Claim 17 claims: "A rotary photographic shutter as in Claim 16 comprising:

- a) a drive arm pivotally supported on the base plate to swing back and forth through a defined arc, the swing of the drive arm in one direction acting to move the shutter blades to an open position and the swing in a return direction acting to move the shutter blades to a closed position (See connecting rod 12' and see angle lever 15.); and
- b) the damping system arranged to arrest the swing of the drive arm at each end of the arc."

Furthermore, see column 3, lines 43 through 50.

In order to release the locked push button, the invention includes connecting rod 12' which is connected, at one end, to the angle lever 15. At the other end, rod 12' abuts against the pin 14 of push button 10. The angle lever 15, in turn, abuts, in the closed position of the shutter, against lug 20a' of the shutter blade actuating ring 20' due to the action of spring 16. In the opening phase of the shutter, lever 15 executes a counterclockwise rotary motion limited by the fixed pin 18.

Allowable Subject Matter

8. Claims 18-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record neither shows nor suggests all of the elements of claim 18, in combination, and particularly:

“b) a detent having opposite ends disposed to arrest the swinging movement of a shutter blade operating drive arm at each end of the swing;

c) bumpers on each of the opposite ends of the detent; and

d) at least one damper on the drive arm positioned to strike and engage against each of the shaped bumpers at the limits of the swing of the drive arm.”

9. Claim 19 depends from claim 18.

10. Each and every limitation of claim 20 is required to patentably distinguish over the prior art of record.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Dowe U.S. Patent 4,881,093 teaches an electromagnetic shutter apparatus.

Devenyi U.S. Patent 6,806,985 B1 teaches an optical system with shutter assembly having an integral shutter-mounted actuator.

Douglas U.S. Patent 3,618,500 teaches a photographic exposure control system with automatic cocking mechanism.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MELISSA J. KOVAL whose telephone number is (571)272-2121. The examiner can normally be reached on Monday through Friday.

13. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Assouad can be reached on 571-272-2210. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

14. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MELISSA J KOVAL/
Primary Examiner, Art Unit 2862

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Primary Examiner
Art Unit 2862

MJK